

**Ypsilanti Community Schools  
2020 Summer School Program – A Focus on Priority Standards**

**English Language Arts 2020 Summer School Focus Areas**

<b>Kindergarten</b>	Print	<ul style="list-style-type: none"> <li>● RF.K.1 Demonstrate understanding of the organization and basic features of print.</li> <li>● RF.K.1.c: Understand that words are separated by spaces in print.</li> <li>● RF.K.1.d: Recognize and name all uppercase and lowercase letters of the alphabet.</li> </ul>
	Phonological Awareness	<ul style="list-style-type: none"> <li>● RF.K.2.c: Blend and segment onsets and rimes of spoken words.</li> </ul>
	Phonics and Word Recognition	<ul style="list-style-type: none"> <li>● RF.K.3.a: Demonstrate basic knowledge of one-to-one letter sound correspondences by producing the primary or many of the most frequent sound for each consonant.</li> <li>● RF.K.3.c: Read common high-frequency words by sight (e.g. the, of, to, you, she, my, is, are, do, does).</li> <li>● RF.K.5 Know and apply grade-level phonics and word analysis skills in decoding words.</li> </ul>
	Informational Reading	<ul style="list-style-type: none"> <li>● RI.K.1. With prompting and support, ask and answer questions about key details in a text.</li> <li>● RI.K.2. With prompting and support, identify the main topic and retell key details of a text.</li> </ul>
	Informational Writing Personal Expertise	<ul style="list-style-type: none"> <li>● W.K.2. Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.</li> <li>● W.K.8. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.</li> </ul>
<b>1<sup>st</sup> Grade</b>	Phonological Awareness	<ul style="list-style-type: none"> <li>● RF.1.2 Demonstrate understanding &amp; spoken words, syllables, sounds phonemes.</li> <li>● RF.1.2.d: Segment spoken single-syllable words into their complete sequence of individual sounds (phonemes).</li> </ul>
	Phonics and Word Recognition	<ul style="list-style-type: none"> <li>● RF.1.3 Know and apply grade level phonics and word analysis skills in decoding words.</li> <li>● RF.1.3.e: Decode two-syllable words following basic patterns by breaking the words into syllables.</li> <li>● RF.1.3.g: Recognize and read grade-appropriate irregularly spelled words.</li> </ul>
	Readers Learn from Informational Reading	<ul style="list-style-type: none"> <li>● RI.1.1. Ask and answer questions about key details in a text.</li> <li>● RI.1.2. Identify the main topic and retell key details of a text.</li> <li>● RI.1.5. Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text.</li> </ul>
	Informational Books: Personal Expertise	<ul style="list-style-type: none"> <li>● W.1.2. Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide some sense of closure.</li> <li>● W.1.7. Participate in shared research and writing projects (e.g., explore a number of “how-to” books on a given topic and use them to write a sequence of instructions).</li> </ul>
<b>2<sup>nd</sup> Grade</b>	Phonics and Word Recognition	<ul style="list-style-type: none"> <li>● 2RF.3: Know and apply phonics and word analysis skills in decoding words.</li> <li>● 2RF.3.b: Decode short and long vowel sounds in two-syllable words.</li> <li>● 2RF.3.d: Recognize and identify root words and common suffixes and prefixes.</li> <li>● 2RF.3.e: Read grade-appropriate irregularly spelled words.</li> </ul>
	Informational Book Clubs	<ul style="list-style-type: none"> <li>● RI.2.1. Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.</li> <li>● RI.2.2. Identify the main topic of a multi-paragraph text as well as the focus of</li> </ul>

		specific paragraphs within the text.
	Shared Research & Informational Writing Descriptive Reports	<ul style="list-style-type: none"> <li>● W.2.2. Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section.</li> <li>● W.2.7. Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations).</li> </ul>
<b>3<sup>rd</sup> Grade</b>	Phonics and Word Recognition	<ul style="list-style-type: none"> <li>● 3RF3: Know and apply phonics and word analysis skills in decoding words.</li> <li>● 3RF.3.a: Identify and know the meaning of the most common prefixes and derivational suffixes.</li> <li>● 3RF.3.c: Decode multi-syllable words.</li> <li>● 3RF.3.d: Read grade-appropriate irregularly spelled words.</li> </ul>
	Informational Research Clubs	<ul style="list-style-type: none"> <li>● RI.3.1. Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.</li> <li>● RI.3.2. Determine the main idea of a text; recount the key details and explain how they support the main idea.</li> </ul>
	Informational Research Writing	<ul style="list-style-type: none"> <li>● W.3.7. Conduct short research projects that build knowledge about a topic.</li> <li>● W.3.8. Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.</li> </ul>
<b>4<sup>th</sup> Grade</b>	Phonics and Word Recognition	<ul style="list-style-type: none"> <li>● 4RF3: Know and apply grade-level phonics and word analysis skills in decoding words.</li> <li>● 4RF.3.a: Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.</li> </ul>
	Informational Reading Research	<ul style="list-style-type: none"> <li>● RI.4.1. Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.</li> <li>● RI.4.2. Determine the main idea of a text and explain how it is supported by key details; summarize the text.</li> <li>● RI.4.9. Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.</li> </ul>
	Informational Research Writing	<ul style="list-style-type: none"> <li>● W.4.7. Conduct short research projects that build knowledge through investigation of different aspects of a topic.</li> <li>● W.4.8. Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.</li> </ul>
<b>5<sup>th</sup> Grade</b>	Phonics and Word Recognition	<ul style="list-style-type: none"> <li>● 5RF3: Know and apply grade-level phonics and word analysis skills in decoding words.</li> <li>● 5RF3.a: Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.</li> </ul>
	Informational Reading Research	<ul style="list-style-type: none"> <li>● RI.5.1. Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.</li> <li>● RI.5.7. Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.</li> <li>● RI.5.9. Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.</li> </ul>
	Informational Research Writing	<ul style="list-style-type: none"> <li>● W.5.7. Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.</li> <li>● W.5.8. Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources.</li> </ul>

<p><b>6<sup>th</sup> Grade</b></p>	<p>Writing the Argument</p>	<ul style="list-style-type: none"> <li>● RI.6.7. Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.</li> <li>● RI.6.8. Trace and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not.</li> <li>● W.6.1. Write arguments to support claims with clear reasons and relevant evidence.</li> <li>● W.6.8. Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources.</li> <li>● L.6.6. Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.</li> </ul>
<p><b>7<sup>th</sup> Grade</b></p>	<p>Writing the Argument</p>	<ul style="list-style-type: none"> <li>● RI.7.5. Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to the development of the ideas.</li> <li>● RI.7.8. Trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims.</li> <li>● W.7.1. Write arguments to support claims with clear reasons and relevant evidence.</li> <li>● W.7.8. Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.</li> <li>● L.7.6. Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.</li> </ul>
<p><b>8<sup>th</sup> Grade</b></p>	<p>Writing the Argument</p>	<ul style="list-style-type: none"> <li>● RI.8.5. Analyze in detail the structure of a specific paragraph in a text, including the role of particular sentences in developing and refining a key concept.</li> <li>● RI.8.8. Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced.</li> <li>● W.8.1. Write arguments to support claims with clear reasons and relevant evidence.</li> <li>● W.8.8. Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.</li> <li>● L.8.6. Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.</li> </ul>
<p><b>9<sup>th</sup> Grade</b></p>	<p>Argument Writing Genres</p>	<ul style="list-style-type: none"> <li>● RI.9-10.3. Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them.</li> <li>● RI.9-10.8. Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning.</li> <li>● W.9-10.1. Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.</li> <li>● L.9-10.6. Acquire and use accurate general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.</li> </ul>

<b>10<sup>th</sup> Grade</b>	Argument Writing Genres	<ul style="list-style-type: none"> <li>RI.9-10.3. Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them.</li> <li>RI.9-10.8. Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning.</li> <li>W.9-10.1. Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.</li> <li>W.9-10.9b. Apply grades 9–10 Reading standards to literary nonfiction (e.g., “Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning”).</li> <li>L.9-10.6. Acquire and use accurate general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.</li> </ul>
<b>11<sup>th</sup> Grade</b>	Writing the Argument	<ul style="list-style-type: none"> <li>RI.11-12.8. Delineate and evaluate the reasoning in seminal U.S. texts, including the application of constitutional principles and use of legal reasoning (e.g., in U.S. Supreme Court majority opinions and dissents) and the premises, purposes, and arguments in works of public advocacy (e.g., The Federalist, presidential addresses).</li> <li>W.11-12.1. Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.</li> <li>W.11-12.9. Draw evidence from literary or informational texts to support analysis, reflection, and research.</li> </ul>
<b>12<sup>th</sup> Grade</b>	Informational Essay	<ul style="list-style-type: none"> <li>RI.11-12.7. Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem.</li> <li>W.11-12.2. Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.</li> </ul>

### Mathematics 2020 Summer School Focus Areas

<b>Kindergarten</b>	<ul style="list-style-type: none"> <li>Oral counting to 100 by 1 and 10 (<a href="#">K.CC.1</a>).</li> <li>Count to tell the number of objects up to 20 (<a href="#">K.CC.4</a>, <a href="#">K.CC.5</a>).</li> <li>Read and write numbers to 20 (<a href="#">K.CC.3</a>).</li> <li>Solve problems using objects or drawings to add and subtract within 10 (<a href="#">K.OA.2</a>).</li> <li>Understand that teen numbers always have a group of 10 ones and some more ones (<a href="#">K.NBT.1</a>).</li> <li>Recognize combinations within 5 (e.g., 1 and 3 more is 4) and partitions to 5 (2 goes with what quantity to make 5) (<a href="#">K.CC.5</a>).</li> <li>Name and describe shapes (squares, circles, triangles, rectangles, cubes, cones, cylinders, and spheres) and see them in their world (<a href="#">K.G.2</a>).</li> </ul>
<b>1<sup>st</sup> Grade</b>	<ul style="list-style-type: none"> <li>Fluently add and subtract within 10 (<a href="#">1.OA.6</a>).</li> <li>Solve word and bare number problems that involve adding and subtracting within 20 using strategies (e.g., making a ten and counting on) and tools. (<a href="#">1.OA.1</a>, <a href="#">1.OA.6</a>).</li> <li>Count forward and backward from any number within 120 (<a href="#">1.NBT.1</a>).</li> <li>Read and write numerals and represent a number of objects with a written numeral. (<a href="#">1.NBT.1</a>).</li> <li>Understand that a “ten” can be thought of as 10 ones and/or a bundle of ten (<a href="#">1.NBT.A.1A</a>).</li> <li>The numbers from 11-99 are composed of some number of tens and some more ones (<a href="#">1.NBT.A.1B</a>, <a href="#">1.NBT.A.1C</a>).</li> <li>Students develop, discuss, and use efficient, accurate, and generalizable methods to add within 100 and subtract multiples of 10. (<a href="#">1.NBT.C.4</a>, <a href="#">1.NBT.C.6</a>).</li> </ul>

	<ul style="list-style-type: none"> <li>● Use non-standard units (paperclips, toothpicks, pennies, gummy bears, etc) to measure the length of an object by placing them end to end. Understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. <a href="#">(1.MD.2)</a>.</li> <li>● Interpret data and answer questions about the total number of data points in each category. <a href="#">(1.MD.4)</a>.</li> </ul>
<b>2<sup>nd</sup> Grade</b>	<ul style="list-style-type: none"> <li>● Fluently add and subtract within 20 <a href="#">(2.OA.B.2)</a>.</li> <li>● Count within 1,000 by 1, 10, and 100 <a href="#">(2.NBT.2)</a>.</li> <li>● Read and write numbers up to 1,000 <a href="#">(2.NBT.3)</a>.</li> <li>● Understand that a “hundred” can be thought of as 1 hundred, 10 tens, and/or a bundle of 100 ones <a href="#">(2.NBT.A.1A)</a>.</li> <li>● The numbers from 101-999 are composed of some number of hundreds, tens, and ones <a href="#">(2.NBT.A.1)</a>.</li> <li>● Use addition and subtraction within 100 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions <a href="#">(2.OA.1, 2.NBT.5)</a>.</li> <li>● Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction ( <a href="#">2.NBT.6, 2.NBT.7</a>).</li> <li>● Relate addition and subtraction to length. Measure to determine how much longer one object is than another, using cm and inches. <a href="#">(2.MD.4)</a></li> <li>● Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape. <a href="#">(2.G.A.3)</a>.</li> </ul>
<b>3<sup>rd</sup> Grade</b>	<ul style="list-style-type: none"> <li>● Use multiplication and division within 100 to solve [bare number and] word problems in situations involving equal groups, arrays, and measurement quantities <a href="#">(3.OA.A.3)</a>.</li> <li>● Add and subtract within 1000 using strategies and algorithms based on place value <a href="#">(3.NBT.2)</a>.</li> <li>● Understand fractions as numbers <a href="#">(3.NF.1, 3.NF.2)</a>.</li> <li>● Explain equivalent fractions* and compare fractions by reasoning about their size <a href="#">(3.NF.3)</a>.</li> <li>● Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. <a href="#">(3.G.2)</a>.</li> <li>● Describing and analyzing two-dimensional shapes <a href="#">(3.G.1)</a>.</li> <li>● Understand the concept of area and relate it to multiplication and addition <a href="#">(3.MD.5, 3.MD.6, 3.MD.7)</a>.</li> </ul> <p>*Grade 3 expectations are limited to fractions with denominators 2, 3, 4, 6, and 8.</p>
<b>4<sup>th</sup> Grade</b>	<ul style="list-style-type: none"> <li>● Add, subtract fluently to solve bare number and word problems <a href="#">(4.NBT.4, 4.OA.3)</a>.</li> <li>● Multiply and divide multi-digit numbers using conceptually-based models and algorithms (e.g., area model, partial product/quotient) to solve bare number and word problems <a href="#">(4.NBT.5, 4.NBT.6, 4.OA.3)</a>.</li> <li>● Apply the area and perimeter formulas for rectangles in real world problems <a href="#">(4.MD.3)</a>.</li> <li>● Use models to recognize and generate equivalent fractions* <a href="#">(4.NF.A.1)</a>.</li> <li>● Use models to recognize and generate equivalent fractions to illustrate connections between decimal fractions (<math>n/10</math> and <math>n/100</math>) and decimal notation. <a href="#">(4.NF.6)</a>.</li> <li>● Add, and subtract fractions and mixed numbers with like denominators <a href="#">(4.NF.3A, 4.NF.3B, 4.NF.3C, 4.NF.3D)</a>.</li> </ul> <p>*Grade 4 expectations are limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p>

<p><b>5<sup>th</sup> Grade</b></p>	<ul style="list-style-type: none"> <li>● Consolidate understanding of and fluently use algorithms for multi-digit multiplication. <a href="#">5.NBT.5</a>.</li> <li>● Make sense of and justify answers to multi-digit division problems using equations, rectangular arrays, and/or area models. <a href="#">5.NBT.6</a>.</li> <li>● Add, subtract, multiply and divide decimals to the hundredths using models and strategies <a href="#">(5.NBT.7)</a>.</li> <li>● Use equivalent fractions as a strategy to add and subtract fractions (<a href="#">5.NF.1</a>, <a href="#">5.NF.2</a>).</li> <li>● Apply and extend previous understandings of multiplication and division to multiply and divide fractions and mixed numbers (<a href="#">5.NF.3</a>, <a href="#">5.NF.4</a>, <a href="#">5.NF.5</a>, <a href="#">5.NF.6</a>, <a href="#">5.NF.7</a>).</li> <li>● Relate volume to multiplication and addition and use this to find the volume of rectangular prisms (<a href="#">5.MD.3</a>, <a href="#">5.MD.4</a>, <a href="#">5.MD.5</a>).</li> </ul>
<p><b>6<sup>th</sup> Grade</b></p>	<ul style="list-style-type: none"> <li>● Understand ratio concepts and use ratio reasoning to solve problems including unit rate and percent (<a href="#">6.RP.1</a>, <a href="#">6.RP.2</a>, <a href="#">6.RP.3</a>).</li> <li>● Understand ordering of integers and rational numbers and locate them on the number line and in all four quadrants of the coordinate plane (<a href="#">6.NS.5</a>, <a href="#">6.NS.6</a>, <a href="#">6.NS.8</a>).</li> <li>● Solve problems in the form <math>x+p = q</math> and <math>px = q</math> (<a href="#">6.EE.7</a>).</li> <li>● Identify and generate equivalent expressions applying properties including the distributive property (<a href="#">6.EE.3</a>, <a href="#">6.EE.4</a>).</li> <li>● Use independent and dependent variables to represent and analyze two quantities in a real-world problem (<a href="#">6.EE.9</a>).</li> <li>● Find and use measures of center and range for a data set to introduce distributions (<a href="#">6.SP.3</a>).</li> <li>● Find the area of triangles and quadrilaterals by composing or decomposing into triangles and other shapes (<a href="#">6.G.1</a>).</li> <li>● Find the surface area and volume of rectangular prisms (<a href="#">6.G.2</a>, <a href="#">6.G.4</a>).</li> </ul> <p>*Look for opportunities for students to strengthen their fluency with operations with fractions that were introduced in 5th grade.</p>
<p><b>7<sup>th</sup> Grade</b></p>	<ul style="list-style-type: none"> <li>● Analyze proportional relationships to solve real-world math problems including finding unit rate and probability (<a href="#">7.RP.1</a>).</li> <li>● Identify the constant of proportionality (unit rate) in tables, graphs, equations, and verbal descriptions(<a href="#">7.RP.2</a>).</li> <li>● Use proportional relationships to solve multistep ratio and percent problems including scale drawings and simple probability (<a href="#">7.RP.3</a>, <a href="#">7.G.1</a>, <a href="#">7.SP.5</a>).</li> <li>● Apply and extend understanding of addition, subtraction, multiplication, and division of integers and rational numbers using a variety of strategies including number lines, colored chips, and area models (<a href="#">7.NS.1</a>, <a href="#">7.NS.2</a>).</li> <li>● Solve problems using numerical and algebraic expressions and equations (<a href="#">7.EE.3</a>, <a href="#">7.EE.4</a>).</li> <li>● Use measures of center and variability to draw inferences from data and compare data from more than one data set represented in multiple ways in formats (e.g., dot plots, histograms, numerical data) (<a href="#">7.SP.4</a>).</li> </ul>
<p><b>8<sup>th</sup> Grade</b></p>	<ul style="list-style-type: none"> <li>● Understand and interpret the connections between proportional relationships and rate of change and use them to create linear models including equations, tables, and graphs (<a href="#">8.EE.5</a>, <a href="#">8.EE.6</a>, <a href="#">8.F.4</a>).</li> <li>● Analyze and solve linear equations and pairs of simultaneous linear equations using multiple representations (i.e., tables, graphs, and equations) (<a href="#">8.EE.7</a>, <a href="#">8.EE.8</a>).</li> <li>● Know and apply the properties of integer exponents to generate equivalent numerical expressions (<a href="#">8.EE.1</a>).</li> <li>● Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally (<a href="#">8.F.5</a>).</li> <li>● Investigate patterns of association in bivariate data using scatterplots, line of best fit, and two-way tables (<a href="#">8.SP.1</a>, <a href="#">8.SP.2</a>, <a href="#">8.SP.3</a>).</li> <li>● Apply the Pythagorean Theorem to determine unknown side lengths in right triangles including distance between points in the coordinate plane (<a href="#">8.G.7</a>, <a href="#">8.G.8</a>).</li> </ul>

<b>Algebra 1</b>	<ul style="list-style-type: none"> <li>● Interpret the structure of expressions and generate equivalent forms for linear, quadratic, and exponential functions (e.g., using the distributive property, factoring, completing the square, properties of exponents) (<a href="#">A.SSE.1</a>, <a href="#">A.SSE.2</a>, <a href="#">A.SSE.3</a>, <a href="#">N.RN.2</a>).</li> <li>● Create equations and inequalities that describe numbers or relationships and use them to solve problems (<a href="#">A.CED.1</a>, <a href="#">A.CED.2</a>, <a href="#">A.CED.4</a>).</li> <li>● Solve systems of equations algebraically and graphically (<a href="#">A.REI.6</a>).</li> <li>● Solve quadratic equations in one variable using multiple representations (<a href="#">A.REI.4</a>).</li> <li>● Understand the concept of a function and use function notation (<a href="#">F.IF.1</a>, <a href="#">F.IF.2</a>).</li> <li>● Interpret functions and the key features of their tables, graphs, and equations (<a href="#">F.IF.4</a>, <a href="#">F.IF.7a</a>, <a href="#">F.LE.2</a>).</li> <li>● Distinguish between situations that can be modeled with linear and exponential functions (<a href="#">F.LE.1</a>, <a href="#">F.LE.5</a>).</li> </ul>
<b>Geometry</b>	<ul style="list-style-type: none"> <li>● Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures (<a href="#">G.SRT.5</a>, <a href="#">G.CO.8</a>).</li> <li>● Define trigonometric ratios and solve problems involving right triangles (<a href="#">G.SRT.6</a>, <a href="#">G.SRT.8</a>).</li> <li>● Use coordinates to prove simple geometric theorems (i.e., slope criteria for parallel and perpendicular lines, computing perimeters of polygons, and areas of triangles and rectangles) (<a href="#">G.GPE.5</a>, <a href="#">G.GPE.7</a>).</li> <li>● Use transformations to map a geometric figure onto another and possibly determine if they are congruent or similar (<a href="#">G.CO.5</a>, <a href="#">G.CO.6</a>, <a href="#">G.SRT.2</a>).</li> <li>● Prove and apply geometric theorems and definitions (e.g., lines, angles, triangles, parallelograms) (<a href="#">G.CO.9</a>, <a href="#">G.CO.10</a>, <a href="#">G.CO.11</a>).</li> <li>● Construct, interpret, and summarize data in two-way tables (<a href="#">S.CP.4</a>, <a href="#">S.ID.5</a>).</li> </ul>
<b>Algebra 2</b>	<ul style="list-style-type: none"> <li>● Interpret functions (i.e., exponential, logarithmic, polynomial, rational, and radical) and the key features of their tables, graphs, and equations by hand and using technology (<a href="#">F.IF.4</a>, <a href="#">F.IF.7</a>).</li> <li>● Identify and use transformations of functions to solve problems in multiple representations (<a href="#">F.BF.3</a>).</li> <li>● Work with trigonometric functions and the unit circle (<a href="#">F.TF.1</a>, <a href="#">F.TF.2</a>).</li> <li>● Perform operations on polynomial expressions and use strategies to identify zeros (<a href="#">A.APR.1</a>).</li> <li>● Solve using multiple representations advanced algebraic equations (i.e., polynomial, exponential, radical, rational) (<a href="#">A.REI.2</a>, <a href="#">A.REI.11</a>, <a href="#">A.APR.2</a>, <a href="#">A.APR.3</a>).</li> <li>● Use appropriate tools (e.g., spreadsheets, calculators, and tables) strategically to interpret quantitative data using measures of center, spread, and distribution shape (<a href="#">S.ID.2</a>, <a href="#">S.ID.3</a>, <a href="#">S.ID.4</a>).</li> <li>● Fit a function to a given data set, and use it to solve problems and identify trends (<a href="#">S.ID.6</a>).</li> </ul> <p>Make inferences and justify conclusions from sample surveys, experiments, and observational studies (<a href="#">S.IC.3</a>, <a href="#">S.IC.4</a>, <a href="#">S.IC.5</a>, <a href="#">S.IC.6</a>).</p>